

IDS 08/21/2003

Form PTO-1449  
Equivalent

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No. 500.37488CC5  
Serial No. (not yet assigned) 10/644,824  
Applicant: Y. SHIROISHI  
Filing Date: August 21, 2003  
Group: 2652  
Page 1 of 2

U.S. Patent Documents

Examiner Initials	Document No.	Date	Name	Class Subclass	Filing Date If Approp.
Ch	4,651,248	3/87	Shilki et al		
	4,809,232	2/89	Baumbaugh et al		
	4,949,039	8/90	Grunberg		
	5,143,794	9/92	Suzuki et al		
	5,208,590	4/93	Dieney et al		
	5,363,251	11/94	Kamo et al		
	5,446,307	8/95	Lux et al		
	5,493,487	2/96	Cain et al		
	5,583,752	8/96	Komuro et al		
	5,572,490	11/96	Kazama		
	5,821,596	4/97	Santini		
	5,712,747	1/98	Voldman et al		
	5,739,988	4/98	Gill		
	5,932,343	8/99	Hayashi et al		
	5,949,623	9/99	Lin		
	5,956,208	9/99	Kawazoe		
	5,989,523	10/99	Chung et al		
	5,970,602	10/99	Harada et al		
	6,014,289	1/00	Goss		
	6,034,851	3/00	Zarouri et al		
	6,038,102	3/00	Balakrishnan et al		
	6,046,882	4/00	Pattanaik et al		
	6,055,131	4/00	Takahashi et al		
	6,069,774	5/00	Arisaka et al		
	6,114,850	9/00	Hayashi		
	6,141,190	10/00	Nakamoto et al		
	6,122,818	9/00	Lee		
	6,125,019	9/00	Hoshiya et al		
	6,134,084	10/00	Ohwe et al		
	6,163,443	12/00	Matagami et al		
	6,181,514	1/01	Santini et al		
	6,188,546	2/01	Nakajima et al		
	6,194,896	2/01	Takahashi et al		
	6,201,687	3/01	Yamamoto et al		
	6,313,969	11/01	Hattori et al		
	6,324,035	11/01	Shiroishi		
	6,407,892	6/02	Shiroishi		
	6,410,133	6/02	Kirino et al		
	6,417,998	7/02	Crue et al		

WR  
11-29-06